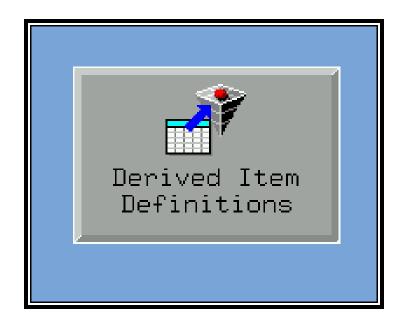


# CHAPTER 7

# **DERIVED ITEMS**



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### 7. DERIVED ITEMS

#### Introduction

A derived item is an item defined in the Item Data Dictionary that is not on the survey form. Its value may be derived from form items, or from a combination of form items and other derived items. Derived items are often created for review purposes. Once the values for derived items are calculated, they are stored in the survey's item file (DATA00.ITyyyypp) and can be viewed in the Review and Correction module. Derived items may be used to define edits and they can also be tabbed.

Example: Items A, B, C, and D are collected on the survey form. A sum of these four items is desired, therefore a derived Item E is created. Item E is considered a derived item because it is not actually an item on the survey form. Its value is derived as the sum of Item A + Item B + Item C + Item D.

Not all surveys will have derived items. For those that do, the following steps must be taken to create derived items and to calculate their values:

- Determine all derived items that are needed for the survey. Enter each one in the Item Data Dictionary with ISOURCE = 'D'. (See chapter 2.1)
- Determine which versions (i.e., reported, edited, adjusted, weighted) of the item data (used to compute the derived item values) will be needed. Update the survey's data version file accordingly. (See chapter 2.13)
- Enter the formulas needed to calculate the values for each derived item. Be sure to include code for the data flag if something other than 'D' is desired.
  - Formulas are typically entered to calculate the *edited* version of the derived item, although a separate derived formula may also be entered to compute the *adjusted* version of the derived item. Formulas are entered using Option 1 from the DERIVED ITEM DEFINITIONS button. (See chapter 7.1)
- Determine which stat periods of data will be needed to compute the derived item values. Update the survey's relative stat period file accordingly. Stat periods are defined using Option 2 from the DERIVED ITEM DEFINITIONS button. (See chapter 7.4)
- If the derived item is a roster item, define the formula using the Roster Derived Items procedures. Derived roster items are defined using Option 3 from the DERIVED ITEM DEFINITIONS button. (See Chapter 14 Roster Items.) Not all surveys will have roster items.

- Generate the SAS code needed to create the derived program for your survey. (See chapter 7.2)
- Consult with your production programmer to determine if survey-specific code is needed to calculate the value of derived items for your survey. If it is, the programmer will be responsible for writing the code needed. (See chapter 7.5)
- Run the derived program for an individual ID in the Review and Correction module, using any of the ID x Item screens. (See chapter 4.2)
- Run the derived program on the entire survey "in batch" mode. (See chapter 7.3)
- Test the derived formulas by running the derived program on the development machine. When you are confident that the program is producing the intended results, you can have the production programmer copy the parameters to the production machine. Be sure to regenerate the code on the production machine once the parameters have been copied.